Date User:

Wednesday, 5/31/2006 7:39:23 AM

Kim Johnston

## **Process Sheet**

Customer

: CU-DAR001 Dart Helicopters Services

Job Number **Estimate Number**  : 27297

P.O. Number

: 10921

: NIA

This Issue : 5/31/2006 Prsht Rev.

NIA : NIA

S.O. No. : N/A

Type

: SMALL /MED FAB

**Drawing Name** 

Part Number

: D2003041 . D2003 REV B

: TUBE ASSEMBLY

**Drawing Number Project Number** 

: N/A

**Drawing Revision** 

Material **Due Date** 

: 6/30/2006

Qty:

5 Um:

Each

Written By

First Issue

**Previous Run** 

**Checked & Approved By** 

Comment

**Additional Product** 

Job Number:



Seq. #:

**Machine Or Operation:** 

Description:

1.0 DC

DOCUMENT CONTROL

Comment: DOCUMENT CONTROL

Photocopy bluefile & type labels per PPP D2003-041

06/05/31

2.0

M304TR0500W035

304 RD Tube .500 x .035W



Comment: Qty.:

0.5145 f(s)/Unit Total:

2.5725 f(s)

Material:1/2"Æ x 0.035" wall AISI 304 SS tubing

Batch: 1100928

FF 06.06.08

3.0

M26506

Firesleeve-crkl .375IDia

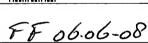


Comment: Qty.:

0.5250 f(s)/Unit Total:

2.6250 f(s)

Batch: 1717521



4.0

MS208198J



Material: M2650-6 Heat sleeve



Comment: Qty.:

2.0000 Each(s)/Unit Total:

10.0000 Each(s)

Pick:

**Qty Part Number** 

Description

2 MS20819-8J

Sleeve

FF 06-06-08

5.0

AN8188J

Nut

2.0000 Each(s)/Unit Total:

10.0000 Each(s)

Pick:

Comment: Qty.:

**Qty Part Number** 

Description

2 AN818-8J Nut M16735

FF 06-06-08

## Dart Aerospace Ltd

W/O:			DER CHANGES								
DATE	STEP		PROCEDURE CHANGE		Ву	Date	Qty	Approval Mfg / Design Mgr	Approval QC Inspector		
		<u> </u>									
						at .					
······································											

NCR:		WORK ORDER NON-CONFORMANCE (NCR)											
		Description of NC		Corrective Action Section B	1.2.1	Verification	Approval						
DATE	STEP	Section A	Initial Design Mgr	Action Description  Design Mgr	Sign & Date	Section C	Approval Design Mgr	Approval QC Inspector					
			*										
							•						
	-	4											
					*								
		ė.					E-						
								-					
	9			,									
				*									

Part No:	PAR #: Fault Catego	ory: NCR:	Yes No DQA:	Date: 06/06/14
NOTE: Date & initial all entries			QA: N/C Closed:	Date:

Wednesday, 5/31/2006 7:39:24 AM Date: User: Kim Johnston **Process Sheet** Drawing Name: TUBE ASSEMBLY Customer: CU-DAR001 Dart Helicopters Services Job Number: 27297 Part Number: D2003041 Job Number: Seq. #: Description: Machine Or Operation: Heat Shrink D2182 6.0 Comment: Qty.: 0.3750 f(s)/Unit Total: 1.8750 f(s) Pick: **Qty Part Number** Description Batch B 21864A FF 06.06.08 1 D2182-045 Heat shrink SMALL & MEDIUM FAB RESOURCE 1 SMALL FAB 1 7.0 Comment: SMALL & MEDIUM FAB RESOURCE 1 FF 06.06.13 1-Cut: 5.88" long as per Dwg D2003 2-Cut: 6.00" long as per Dwg D2003 3-Form tube as per template D2003-041 4-Assemble as per Dwg D2003 INSPECT WORK TO CURRENT STEP 8.0 Comment: INSPECT WORK TO CURRENT STEP 9.0 PACKAGING 1 PACKAGING RESOURCE #1 Comment: PACKAGING RESOURCE #1 Identify and Stock Location: 10.0 DC 06/06/19 Comment: DOCUMENT CONTROL Inspection Level 21 4 do. do. 64 Job Completion

## Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES													
DATE	STEP		PROCEDURE CHANGE		Ву	Date	Qty	Approval Mfg / Design Mgr	Approval QC Inspector						
		***	*												
		i.	ž.												
	J														

NCR:		WORK ORDER NON-CONFORMANCE (NCR)												
		Description of NC		Corrective Action Section B	Verification	Approval								
DATE	STEP	Section A	Initial Design Mgr	Action Description  Design Mgr	Sign & Date	Section C	Approval Design Mgr	Approval QC Inspector						
	*			·										
		)												

Part No:	PAR #:	Fault Category: NO	CR:	Yes No	DQA:	Date:
NOTE: Date & initial all entries				QA: N/C CI	losed:	Date:





	a			
DESIG	4	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHEO	7E	APPROVED	D2003 SHEET 1 0	V. B )F 2
 99.0	06.08		TITLE SC 206 CABIN HEATER TUBE ASSEMBLIES	MIS
Α		90.04.09	NEW ISSUE	
В		99.06.08	UPDATE PER TEMPLATES; ADD P/N'S;	



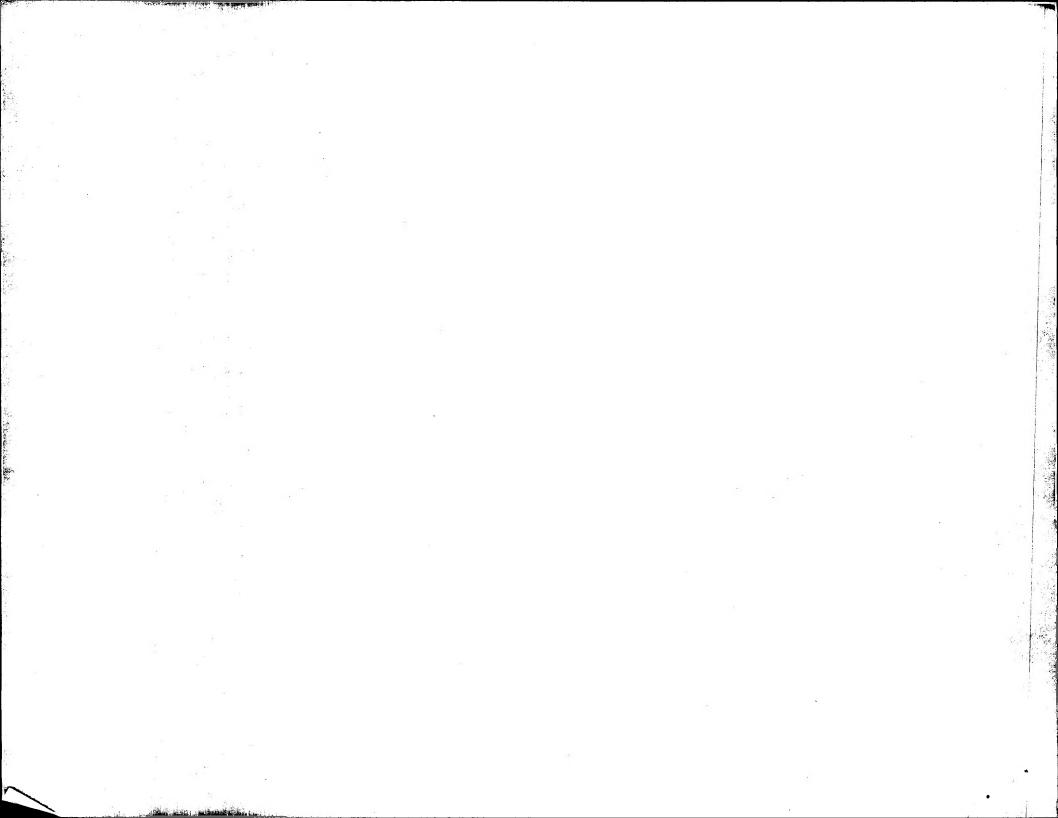
P/N	TEMPLATE	HEATSLEEVE LENGTH	CUT LENGTH OF TUBE	MS20819-8J SLEEVE	AN818-8J NUT	MS20819-8D SLEEVE	AN818-8D NUT	MS20819-6D SLEEVE	AN818-6D NUT	DESC.	MATERIAL <sup>4/6/7</sup>	VENDOR OR SPEC
D2003-001	T2003-001	5.2	6.00					2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WW-T-700/6
D2003-003	T2003-003	7,3	8.12					2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WW-T-700/6
D2003-005	T2003-005	9.8	10.62					2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WW-T-700/6
D2003-007	T2003-007	20.0	19.63					2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WW-T-700/6
D2003-009	T2003-009	12.38	12.44					2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WW-T-700/6
D2003-011	T2003-011	33.31	32.38					2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WW-T-700/6
D2003-013	T2003-013	12.7	13.54					2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WW-T-700/6
D2003-015	T2003-015	17.2	18,00	1			75	2	2	TUBE ASS'Y	8061-T6 0.375 OD x 0.035 W	WW-T-700/6
D2003-017	T2003-017	17.0	16.25					2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WW-T-700/6
D2003-019	T2003-019	9.8	10,62			2	2	0		TUBE ASS'Y	6061-T6 0.500 OD x 0.035 W	WW-T-700/6
D2003-021	T2003-021	N/A	2.25			2	2			TUBE ASS'Y	6061-T6 0.500 OD x 0.035 W	WW-T-700/6
D2003-023	T2003-023	4.5	5.33		1	2	2			TUBE ASS'Y	6061-T6 0.500 OD x 0.035 W	WW-T-700/6
D2003-025	T2003-025	9.8	10,60			2	2			TUBE ASS'Y	6061-T6 0.500 OD x 0.035 W	WW-T-700/6
D2003-027	T2003-027	7.25	7.38			2	2			TUBE ASS'Y	6061-T6 0.500 OD x 0.035 W	WW-T-700/6
D2003-029	T2003-029	17.2	18.00			2	2			TUBE ASS'Y	6061-T6 0.500 OD x 0.035 W	WW-T-700/6
D2003-031	T2003-031	14.6	15,38	2	2					TUBE ASS'Y	CRES 0.500 OD x 0.035 W	AISI 304
D2003-033	T2003-033	29,75	29.62	2	2					TUBE ASS'Y	CRES 0.500 OD x 0.035 W	AISI 304
D2003-035	T2003-035	24.7	27.00	2	2					TUBE ASS'Y	CRES 0.500 OD x 0.035 W	AISI 304
D2003-037	T2003-037	24.81	23.38	2	2					TUBE ASS'Y	CRES 0.500 OD x 0.035 W	AISI 304
D2003-039	T2003-039	34.0	34.00	2	2					TUBE ASS'Y	CRES 0.500 OD x 0.035 W	AISI 304
D2003-041	T2003-041	6.0	5.88	2	2					TUBE ASS'Y	CRES 0.500 OD x 0.035 W	AISI 304
D2003-043	T2003-043	11.7	10.75	2	2					TUBE ASS'Y	CRES 0.500 OD x 0.035 W	AISI 304
D2003-045	T2003-045	3.50	2.44	2	2					TUBE ASS'Y	CRES 0:500 OD x 0.035 W	AISI 304
D2003-047	T2003-047	5.56	5.56	2	2					TUBE ASS'Y	CRES 0.500 OD x 0.035 W	AISI 304
D2003-049	T2003-049	33.2	34.00	2	2			-,		TUBE ASS'Y	CRES 0.500 OD x 0.035 W	AISI 304
D2003-077	T2003-077	N/A	6.25					1	1	JET JET	6061-T6 0.375 OD x 0.035 W	WW-T-700/6
D2003-101	T2003-101	13.25	13.13					2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WW-T-600/6
D2003-103	T2003-103	12.38	12.00					2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WW-T-600/6
D2003-105	T2003-105	10.75	10.60 12.25					2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W 6061-T6 0.375 OD x 0.035 W	WW-T-600/6
D2003-107	T2003-107 T2003-109	12,75 8.25							- 2	TUBE ASS'Y TUBE ASS'Y	6061-T6 0.500 OD x 0.035 W	WW-T-600/6 WW-T-600/6
D2003-109 D2003-111	T2003-109	4.75	8.125 4.625			2	2			TUBE ASS'Y	6061-T6 0.500 OD x 0.035 W	WW-T-600/6
D2003-111	T2003-111	4.75	4.023							HEATSLEEVE	M2650-20 CRINKLE-SOFT	STRATOFLEX
D2003-116	T2003-110	4.0								HEATSLEEVE	M2650-16 CRINKLE-SOFT	STRATOFLEX
D2003-120	T2003-120	4.0								HEATSLEEVE	M2650-14 CRINKLE-SOFT	STRATOFLEX
D2003-14 D2003-16	T2003-14	4.0		. 1						HEATSLEEVE	M2650-16 CRINKLE-SOFT	STRATOFLEX
D2003-205	T2003-205	9.75	9.60				-	2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WW-T-700/6
D2003-207	T2003-207	3.75	3.75	-				2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WW-T-700/6

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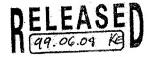
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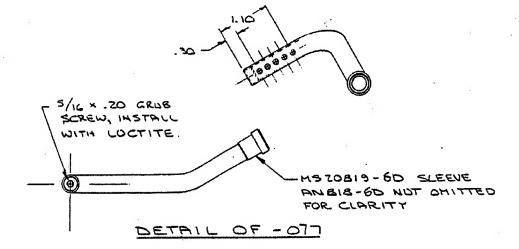


Harri		Orania Partina	
 DESIGN	DRAWN BY	DART AEROSPACE HAWKESBURY, ONTARIO, CAI	
CHECKED	APAROVED	DRAWING NO. D2003	REV. 8 SHEET 2 OF 2
DATE		TITLE	SCALE
99.06.08		206 CABIN HEATER TUBE AS	SEMBLIES NTS



## Notes:

- (1) USE STRATOFLEX M2650-6 CRINKLE-SOFT HEATSLEEVE.
- (2) TUBING ASSEMBLIES TO BE CUT AND BENT IN ACCORDANCE WITH TEMPLATES.
- (3) TUBES TO BE FLARED 30° TO MATE WITH FITTINGS MADE TO MS33514.
- (4) ENSURE SEAMLESS TUBING IS USED.
- (5) INSTALL HEATSLEEVE OVER ALL TUBES WITH A DESIGNATED LENGTH OF HEATSLEEVE PER THE PARTS LIST.
- (6) 5052 (WW-T-700/4) TUBING MAY BE SUBSTITUTED WHEN 6061 TUBING IS NOT AVAILABLE.
- (7) 0.049 WALL THICKNESS CRES TUBING MAY BE SUBSTITUTED WHEN 0.035 IS NOT AVAILABLE.
- (8) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.



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